



ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

1927 STATION NUMBERS

Numbers 7349 to 7395

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7349

Date, Dec 11 1904

Time of day, 12:05 : of tide.

Locality, Off Cape Cod Pt.

Exact position, Middle life report trans

west 2 1/2 miles

Depth, 11 1/2 ft.

Nature of bottom, m. with sand & shells

Dredging instrument used, beam dredge

Direction of drift, N. E. ; distance, 1/2 mile

Temperature of air, 75 therm. No.

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0213 temp., 23.5

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450.

Barometer reading, 30.04

State of sky, Clear

Direction of wind, N. W. ; force, 4

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Lt. Comdr.

W. B. Brown, M. D.

Name and position of observer,

Herbert E. West.

NOTES RELATING TO STATION NO. 7349

Starfish, shells and
one sponge

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7350
 Date, Dec 17, 1902
 Time of day, 12:38 : of tide, Flood
 Locality, off Cape Hatteras, N.C.
 Exact position, Lat 25° 4' 37"
 Long. 75° 15' 25"
 Depth, 2 1/2 fathoms
 Nature of bottom, fine coral
 Dredging instrument used, dredge
 Direction of drift, S. by E. ; distance, 1/2 m. S.E.
 Temperature of air, 75 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.024 temp., 23.5
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7450
 Barometer reading, 30.04
 State of sky, clear
 Direction of wind, N. N. W. ; force, 4
 Rain,
 Direction of surface current, : force,
 " of bottom " : force,
 Name of vessel, Fish Hawk
 Service to which attached, U.S. Fish Commission
 Name and rank of commanding officer, J. M. Smith, Lieut. Comdr.
 Name and position of observer, V. C. Went

NOTES RELATING TO STATION NO. 7350

Very good up to ground
Intertidal - sponges - shells - grass -
Star fish - a few small
fish and small crabs.
Alpheids +
Ascidians +
4 sp fish
3 " star fish.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7351
 Date, Dec. 17, 1912
 Time of day, 1:15 : of tide, Flood
 Locality, Off Cape Sable
 Exact position, Lat 35° 28' 45"
 Long. 76° 28' 35"
 Depth, 34 fathoms
 Nature of bottom, Rocky sand
 Dredging instrument used, Otter dredge
 Direction of drift, S. S. E. ; distance, 1/2 mile
 Temperature of air, 77 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0221 temp., 23 1/2
 " at depth of fathoms, "
 " at bottom, 1.0220 " 23 1/2
 Number of salinometer, 7450
 Barometer reading, 30.61
 State of sky, Partly
 Direction of wind, N. W. ; force, 1
 Rain,
 Direction of surface current, : force,
 " of bottom " : force,
 Name of vessel, U. S. Fish Commission
 Service to which attached, U. S. Fish Commission
 Name and rank of commanding officer, James A. Smith
 Name and position of observer, Vernon E. West.

NOTES RELATING TO STATION NO. 7357

Good sponge ground.
Loggerhead sponges
leaf sponges
ascidians
grass
small fish
small crabs
shells.
star fish

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7322

Date, Dec 1, 1902

Time of day, 1:50 ; of tide, Low

Locality, Mouth of Little Florida

Exact position, Lat. $25^{\circ} 4' 32''$ Long. $81^{\circ} 21' 53''$

Depth, 34 fms.

Nature of bottom, soft mud

Dredging instrument used, dredge

Direction of drift, S. S. E. ; distance, 4 miles

Temperature of air, 74 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0230 temp., 23

" at depth of fathoms, "

" at bottom, 1.0230 " 23 1/2

Number of salinometer, 7454

Barometer reading, 30.01

State of sky, Clear

Direction of wind, N. W. W. ; force, 4

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, U. S. Commission

Name and rank of commanding officer, James A. Smith

Bourne, U. S. N.

Name and position of observer,

Vernon C. Mearns

NOTES RELATING TO STATION NO. 7352

Several pieces of branch coral
shells

acidium Δ

small crabs

small fish

worms

holothurians

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7353

Date, Dec. 17, 1902

Time of day, 2:25 : of tide, Flood

Locality, Off Cape Hatteras, N.C.

Exact position, Lat. 35° 10' 00"

Long. 75° 25' 10"

Depth, 44 fathoms

Nature of bottom, light sand & shells

Dredging instrument used, Dredge

Direction of drift, S. ; distance, 1/2 mile

Temperature of air, 71 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0231 temp., 23

" at depth of fathoms, "

" at bottom, 1.0232 " 23 1/2

Number of salinometer, 7450

Barometer reading, 30.07

State of sky, Partly B. & C.

Direction of wind, N. E. ; force, 4 S

Rain,

Direction of surface current, ; force,

" of bottom " : force,

Name of vessel, U. S. Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James L. Smith

Boatman, U. S. N.

Name and position of observer,

Vernon E. West

NOTES RELATING TO STATION NO. 743

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7354

Date, Dec 17, 1912

Time of day, 2 55 ; of tide, Flood

Locality, Cape Cod, Mass.

Exact position, Lat. 41° 28' 30"

Long. 71° 28' 30"

Depth, 4 3/4

Nature of bottom, M. S. S.

Dredging instrument used, Dredge

Direction of drift, S. ; distance, 1/2 mi.

Temperature of air, 73 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0251 temp., 23

" at depth of fathoms, "

" at bottom, 1.0234 " 23 1/2

Number of salinometer, 14150

Barometer reading, 29.94

State of sky, Partly cloudy

Direction of wind, S. ; force, 3

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, U. S. Fish Com.

Service to which attached, U. S. Fish Com.

Name and rank of commanding officer, Lieut. Comdr. J. D. H.

Name and position of observer, Wm. L. H.

Name and position of observer,

Wm. L. H.

NOTES RELATING TO STATION NO. 5-7

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 735-
 Date, Dec. 18, 1912
 Time of day, 9:15 ; of tide, Ebb
 Locality, 1/2 mile from shore
 Exact position, 2 1/2 miles from shore
 Depth, 9 1/2 fms.
 Nature of bottom, gy. s. m. & c. m.
 Dredging instrument used, Dredge
 Direction of drift, S. E. ; distance, 1/2 mile
 Temperature of air, 63 therm. No.,
 " of surface water, " "
 " at depth of fathoms, " "
 " at bottom, " "
 Density at surface, 1.0222 temp., 22
 " at depth of fathoms, " "
 " at bottom, " "
 Number of salinometer, 7453
 Barometer reading, 29.8
 State of sky, Partly cloudy
 Direction of wind, N. E. ; force, 1
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name of vessel, U. S. Fish Com.
 Service to which attached, U. S. Fish Com.
 Name and rank of commanding officer, Lieut. Comdr. J. H. Smith
 Name and position of observer, Vernon S. H. S.

NOTES RELATING TO STATION NO. 1037

at station
There is a small
pool of water
in the middle of the
field
1/4 mile

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7310

Date, Dec 15, 1902

Time of day, 7:00 ; of tide, low

Locality, off Cape Cod

Exact position, 41° 12' 25" N. 71° 12' 25" W.

Depth, 12

Nature of bottom, rocky

Dredging instrument used, dredge

Direction of drift, S. 10° E. ; distance, 1/2 mile

Temperature of air, 55 therm. No.,

" of surface water, " "

" at depth of fathoms, " "

" at bottom, " "

Density at surface, 1.0228 temp., 22

" at depth of fathoms, " "

" at bottom, " "

Number of salinometer, 1000

Barometer reading.

State of sky, Partly Cloudy

Direction of wind, S. ; force, 1

Rain,

Direction of surface current, " ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, U. S. Fish Commission

Name and rank of commanding officer, E. A. Mearns, Lt. Comdr.

Name and position of observer, J. Mearns, Lieut.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7
 Date, June 1, 1902
 Time of day, 10:00; of tide, low
 Locality, Cape Cod, Mass.
 Exact position, Lat. 41° 06' 20"
 Long. 71° 15' 10"
 Depth, 10 fms.
 Nature of bottom, soft mud
 Dredging instrument used, dredge
 Direction of drift, N. E.; distance, 1/2 mile
 Temperature of air, 65 therm. No.,
 " of surface water, " "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.023 temp., 62
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 100
 Barometer reading, 30.1
 State of sky, Partly cloudy
 Direction of wind, N. E.; force, 4
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name of vessel, U. S. Fish Com. Steamer
 Service to which attached, U. S. Fish Com.
 Name and rank of commanding officer, Lt. Comdr.
 Name and position of observer, Vernon L. West

NOTES RELATING TO STATION NO. 7

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7358

Date, Dec. 14, 1902

Time of day, 10.55 ; of tide, low

Locality, off Cape Cod, Mass.

Exact position, Lat. 41° 06' 45" N.

Long. 71° 04' 00" W.

Depth, 10 fathoms

Nature of bottom, gy. s. m. d. sh. & shells

Dredging instrument used, dredge

Direction of drift, N. E. ; distance, 1/2 mile

Temperature of air, 57 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0228 temp., 22.5

" at depth of fathoms, "

" at bottom, 1.0226 " 22.5

Number of salinometer, 7456

Barometer reading, 30.00

State of sky,

Direction of wind, N. E. ; force, 3

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, U. S. Fish Commission

Name and rank of commanding officer, Lieut. Comdr.

Brotherman, U. S. N.

Name and position of observer,

L. M. C. Mott

NOTES RELATING TO STATION NO. 100

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7111
 Date. Aug 1 1882
 Time of day, 10:27 : of tide.
 Locality, off Cape Cod, Mass.
 Exact position, Lat. 25° 30' N.
 Long. 70° 30' W.
 Depth, 46 fms.
 Nature of bottom, gy. m. s. r.
 Dredging instrument used,
 Direction of drift, S. E. ; distance, 1/2 mi.
 Temperature of air, 67 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0229 temp., 22.5
 " at depth of fathoms, "
 " at bottom, 1.0227 " 23
 Number of salinometer, 1000
 Barometer reading, 29.97
 State of sky, b.
 Direction of wind, N. N. E. ; force, 3.
 Rain,
 Direction of surface current, : force.
 " of bottom " : force.
 Name of vessel, U. S. Fish Com.
 Service to which attached, U. S. Fish Com.
 Name and rank of commanding officer, Boatswain U. S. N.
 Name and position of observer, V. S. M.

NOTES RELATING TO STATION NO. 507

2000 0
1000 0
1000 0
1000 0

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 736

Date, 10/1/12

Time of day, 12:00 P.M. of tide, 1/4 flood

Locality, 1/2 mile S. of Cape Fear

Exact position, Lat 25° 15' N.

Long. 79° 50' W.

Depth, 4 1/2 fms.

Nature of bottom, fine sand & shells

Dredging instrument used, dredge

Direction of drift, S. S. E.; distance, 1/2 mile

Temperature of air, 67 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.021 temp., 22.5

" at depth of fathoms, "

" at bottom, 1.023 " 22

Number of salinometer, 7450

Barometer reading, 29.8

State of sky, clear

Direction of wind, N. E.; force, 2

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, U. S. Fish Com.

Name and rank of commanding officer, Lieut. Comdr. J. H. Smith

Name and position of observer, Vernon C. Smith

NOTES RELATING TO STATION NO. 111

111
111
111
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111

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7361
 Date, Dec. 18, 1912
 Time of day, 12 30. of tide. 1/4 full
 Locality, off Cape Cod
 Exact position, Lat. 25° 21' 11" N.
 Long. 70° 29' 10" W.
 Depth, 65 fathoms
 Nature of bottom, rock, coral
 Dredging instrument used, dredge
 Direction of drift, S.W.; distance, 4 miles
 Temperature of air, 67 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0242 temp., 22
 " at depth of fathoms, "
 " at bottom, 1.0236 " 23
 Number of salinometer, 7450
 Barometer reading, 29.93
 State of sky, Partly cloudy
 Direction of wind, N.N.E.; force, 3
 Rain,
 Direction of surface current, : force,
 " of bottom " ; force,
 Name of vessel, U.S.S. Albatross
 Service to which attached, U.S. Fish Commission
 Name and rank of commanding officer, James H. Smith, Lt. Comdr.
 Name and position of observer, J. H. Smith, Lt.

NOTES RELATING TO STATION NO. 11

Several green eggs
found in the
grass
a few feet from the
road
a small
squall
a small dollar

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7362
 Date, Dec. 18, 1912
 Time of day, 1:15 P.M.; of tide, low
 Locality, Cape Cod Bay, Mass.
 Exact position, Lat. $25^{\circ} 04' 15''$
 Long. $61^{\circ} 29' 15''$
 Depth, 4 3/4 fms.
 Nature of bottom, soft mud
 Dredging instrument used, Dredge
 Direction of drift, S. by E.; distance, 1/2 mile
 Temperature of air, 69 therm. No.,
 " of surface water, " "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0236 temp., 22.5
 " at depth of fathoms, "
 " at bottom, 1.0238 " 22.5
 Number of salinometer, 0
 Barometer reading, 29.93
 State of sky, B. c.
 Direction of wind, N. E.; force, 3
 Rain,
 Direction of surface current, : force,
 " of bottom " : force,
 Name of vessel, U. S. Fish Com. Steamer
 Service to which attached, U. S. Fish Com.
 Name and rank of commanding officer, J. C. Smith, Lt. Comdr.
 Name and position of observer, Vernon C. West.

RECORD OF DREDGING, **TEMPERATURE AND DENSITY.**

Station No. *7303*Date, *Dec. 18, 1902*Time of day, *11:30 A.M.*; of tide, *1/2 full*Locality, *off Cape Cod, 1/2 m. S. E.*Exact position, *Lat. 41° 55' N. Long. 70° 15' W.*Depth, *3 1/2 fathoms*Nature of bottom, *rocky*Dredging instrument used, *dredge*Direction of drift, *W. 1/2 N.*; distance, *1/4 m.*Temperature of air, *57* therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, *1.0231* temp., *22*

" at depth of fathoms, "

" at bottom, *1.0235* " *-2.5*Number of salinometer, *7410*Barometer reading, *29.95*State of sky, *Partly cloudy*Direction of wind, *W. 1/2 N.*; force, *2*

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, *U.S.S. Fish Hawk*Service to which attached, *U.S. Fish Commission*Name and rank of commanding officer, *Comdr. J. H. ...**Boatwain ...*Name and position of observer, *Vernon E. ...*

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7364*
 Date, *Dec 12, 1912*
 Time of day, *20 min*; of tide, *4 p.m.*
 Locality, *Bay of ...*
 Exact position, *Lat. 25° 13' 0"*
 Depth, *3 1/4*
 Nature of bottom, *fine sand & shells*
 Dredging instrument used, *dredge*
 Direction of drift, *N. E.*; distance, *1/2 mi.*
 Temperature of air, *70* therm. No.,
 " of surface water, " "
 " at depth of fathoms, " "
 " at bottom, " "
 Density at surface, *1.0224* temp., *22.5*
 " at depth of fathoms, " "
 " at bottom, *1.0227* " *22.5*
 Number of salinometer, *1130*
 Barometer reading, *30.1*
 State of sky, *Partly cloudy*
 Direction of wind, *N. W.*; force, *5*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name of vessel, *U.S.S. Albatross*
 Service to which attached, *U.S. Fish Commission*
 Name and rank of commanding officer, *Comdr. J. A. ...*
Reuben ...
 Name and position of observer, *Wm. ...*

NOTES RELATING TO STATION NO. 100

1. 100 ft. deep
2. 100 ft. deep
3. 100 ft. deep
4. 100 ft. deep
5. 100 ft. deep
6. 100 ft. deep
7. 100 ft. deep
8. 100 ft. deep
9. 100 ft. deep
10. 100 ft. deep

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7000*Date, *Dec. 1, 1900*Time of day, *2:32 P.M.*; of tide, *2/3 full*Locality, *Off Cape San Lucas, B. Ca.*Exact position, *Lat. 25° 13' 37"*Depth, *50*Nature of bottom, *hard mud & shells*Dredging instrument used, *5 ft. beam trawl*Direction of drift, *S. 10° E.*; distance, *1/2 mile*Temperature of air, *73* therm. No., *1000*

" of surface water, " "

" at depth of *10* fathoms, " "

" at bottom, " "

Density at surface, *1.0235* temp., *22.5*" at depth of *10* fathoms, " "" at bottom, *1.0235* " "Number of salinometer, *7400*Barometer reading, *30.1*State of sky, *b, c, s*Direction of wind, *N. N. E.*; force, *5*Rain, *no*

Direction of surface current, " ; force, "

" of bottom " ; force, "

Name of vessel, *Fish Hawk*Service to which attached, *U. S. Fish Comm.*Name and rank of commanding officer, *James A. Smith, Lt. Comdr.*Name and position of observer, *Vernon S. West.*

NOTES RELATING TO STATION NO. 7000

— species of ants
4

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *126*
 Date, *Dec. 1, 1881*
 Time of day, *3 54* of tide, *3/4*
 Locality, *Off Cape Cod*
 Exact position, *Lat. 41° 55' 30" N.*
Long 71° 12' 10" W.
 Depth, *2 3/4*
 Nature of bottom,
 Dredging instrument used, *Hydraulic dredge*
 Direction of drift, *S. by E.*; distance, *1/2 mile*
 Temperature of air. therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0230* temp., *52*
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *500*
 Barometer reading, *30.0*
 State of sky, *Partly clear*
 Direction of wind, *N. by E.*; force, *4*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name of vessel, *U.S.S. Fish Hawk*
 Service to which attached, *U.S. Fish Commission*
 Name and rank of commanding officer, *Comdr. J. B. Smith*
Boatman
 Name and position of observer, *Vernon S. East*

NOTES RELATING TO STATION NO. 1000

7-1-1964

1-1-1964

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7227
 Date, July 15, 1902
 Time of day, 3:43 P.M.; of tide, 4/4 flood
 Locality, off Cape Cod, Mass.
 Exact position, Lat. 25° 03' 15" N.
 Long. 70° 03' 15" W.
 Depth, 24 fathoms
 Nature of bottom, rocky
 Dredging instrument used, dredge
 Direction of drift, S. 16° E.; distance, 1/2 m.
 Temperature of air, 76 therm. No.,
 " of surface water, 1.0230 " 22
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, temp.,
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 6
 Barometer reading, 29.91
 State of sky, Partly cloudy
 Direction of wind, N. N. E.; force, 5
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name of vessel, U.S. Fish Commission
 Service to which attached, U.S. Fish Commission
 Name and rank of commanding officer, Lt. Comdr. H. B. Smith
 Name and position of observer, H. B. Smith

NOTES RELATING TO STATION NO.

2000

11/11/00

1

2000

11/11/00

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *100*Date, *July 5*Time of day, *7.5* ; of tide, *low*Locality, *off Cape Cod*Exact position, *1/2 mile S. of Cape Cod*Depth, *12*Nature of bottom, *fine sand*Dredging instrument used, *dredge*Direction of drift, *drift* ; distance, *1/2 mile*Temperature of air, *65*therm. No., *100*" of surface water, *65*" at depth of *12* fathoms, *65*" at bottom, *65*Density at surface, *1.024*temp., *65*" at depth of *12* fathoms, *65*" at bottom, *65*Number of salinometer, *714*Barometer reading, *30.0*State of sky, *clear*Direction of wind, *drift* ; force, *1*Rain, *no*Direction of surface current, *drift* ; force, *1*" of bottom " ; force, *1*Name of vessel, *U.S.S. Fish Hawk*Service to which attached, *U.S. Fish Com.*Name and rank of commanding officer, *Comdr. J. H. Smith*Name and position of observer, *W. H. Smith*

NOTES RELATING TO STATION NO. 72.4

Adm. of

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. *72*
 Date, *July 1, 1881*
 Time of day, *7.15* of tide, *low*
 Locality, *off Cape Cod*
 Exact position, *Lat. 35° 12'*
Long. 71° 12' W.
 Depth, *10*
 Nature of bottom, *fine sand*
 Dredging instrument used, *dredge*
 Direction of drift, *drift*; distance, *drift*
 Temperature of air, *78* therm. No.,
 " of surface water, " "
 " at depth of fathoms, " "
 " at bottom, " "
 Density at surface, *1.025* temp., *-2*
 " at depth of fathoms, " "
 " at bottom, " "
 Number of salinometer, *6*
 Barometer reading, *30.00*
 State of sky, *b. m.*
 Direction of wind, *N. N. E.*; force, *4*
 Rain,
 Direction of surface current, : force,
 " of bottom " : force,
 Name of vessel, *U. S. Fish Com.*
 Service to which attached, *U. S. Fish Com.*
 Name and rank of commanding officer, *John B. Smith*
Boatsman, U. S. N.
 Name and position of observer, *John B. Smith*

NOTES RELATING TO STATION NO. 600

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7376

Date, July 1, 1891

Time of day, 1:10 P.M.; of tide, low

Locality, Long Island Sound

Exact position, Lat. 40° 45' N. Long. 73° 15' W.

Depth, 2 1/2 fathoms

Nature of bottom, soft mud

Dredging instrument used, dredge

Direction of drift, East; distance, 1/2 mile

Temperature of air, 62 therm. No.,

" of surface water, " "

" at depth of fathoms, " "

" at bottom, " "

Density at surface, 1.021 temp., 52.5

" at depth of fathoms, " "

" at bottom, " "

Number of salinometer, 100

Barometer reading, 30.0

State of sky, clear

Direction of wind, N.W.; force, 4

Rain, none

Direction of surface current, " : force, "

" of bottom " : force, "

Name of vessel, U.S.F.C. Fish Hawk

Service to which attached, U.S. Fish Commission

Name and rank of commanding officer, Z. Tanner, Master

Name and position of observer, J. B. Smith, Assistant

NOTES RELATING TO STATION NO. 1000

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *1111*
 Date, *Oct 17 1882*
 Time of day, *11 40 A.M.*; of tide, *low*
 Locality, *Long Island Sound*
 Exact position, *Lat. 40° 45' N. Long. 73° 45' W.*
 Depth, *3 1/2 fms.*
 Nature of bottom, *fine sand & shells*
 Dredging instrument used, *Hydrog. dredge*
 Direction of drift, *N. E.*; distance, *1/2 mi.*
 Temperature of air, *67* therm. No.,
 " of surface water, " "
 " at depth of fathoms, " "
 " at bottom, " "
 Density at surface, *1.0239* temp., *22.5*
 " at depth of fathoms, " "
 " at bottom, *1.0220* " *23*
 Number of salinometer, *1110*
 Barometer reading, *30.0*
 State of sky, *b. m.*
 Direction of wind, *N. N. E.*; force, *4*
 Rain,
 Direction of surface current, : force,
 " of bottom " : force,
 Name of vessel, *U.S.S. Albatross*
 Service to which attached, *U.S. Fish Commission*
 Name and rank of commanding officer, *Comdr. Smith*
 Name and position of observer, *James S. Ward*

NOTES RELATING TO STATION NO. 172

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *1372*
 Date, *Dec 11, 1891*
 Time of day, *11:00 A.M.*; of tide, *low*
 Locality, *off Cape Cod*
 Exact position, *Long. 71° 23' W.*
 Depth, *10 fms.*
 Nature of bottom, *fine sand*
 Dredging instrument used, *dredge*
 Direction of drift, *N. E.*; distance, *1/2 mile*
 Temperature of air, *70* therm. No.,
 " of surface water, " "
 " at depth of fathoms, " "
 " at bottom, " "
 Density at surface, *1.0225* temp., *23*
 " at depth of fathoms, " "
 " at bottom, *1.0226* " *22*
 Number of salinometer, *1750*
 Barometer reading, *30.0*
 State of sky, *Partly Cloudy*
 Direction of wind, *N. W.*; force, *4*
 Rain,
 Direction of surface current, : force.
 " of bottom " : force.
 Name of vessel, *U.S.S. Albatross*
 Service to which attached,
 Name and rank of commanding officer, *Comdr. J. S. Smith*
 Name and position of observer, *Vernon S. Smith*

NOTES RELATING TO STATION NO. 1000

A few years ago
I had a very large
1000 ft. long
about 100 ft. wide
place, about 100 ft. long
100 ft. wide
which was
very large

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7373*
 Date, *Dec. 12, 1912*
 Time of day, *11 45 a.m.*; of tide, *low*
 Locality, *off Cape Cod, Mass.*
 Exact position, *Lat. 41° 17' N. Long. 70° 15' W.*
 Depth, *4 1/2*
 Nature of bottom, *fine sand & shells*
 Dredging instrument used, *Hydraulic dredge*
 Direction of drift, *N. E.*; distance, *1/2 mi.*
 Temperature of air, *72* therm. No.,
 " of surface water, " "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0228* temp., *22.5*
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7110*
 Barometer reading, *29.1*
 State of sky, *partly cloudy*
 Direction of wind, *N. N. E.*; force, *4*
 Rain,
 Direction of surface current, : force.
 " of bottom " : force.
 Name of vessel, *Researcher*
 Service to which attached, *U. S. Fish Com.*
 Name and rank of commanding officer, *John H. ...*
 Name and position of observer, *...*

NOTES RELATING TO STATION NO. 102

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RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. *1514*
 Date, *Dec. 17, 1902*
 Time of day, *12:00 P.*; of tide, *Low*
 Locality, *off Cape Cod*
 Exact position, *Lat. 41° 15' N. Long. 70° 15' W.*
 Depth, *44 fathoms*
 Nature of bottom, *fine sand*
 Dredging instrument used, *dredge*
 Direction of drift, *N. by E.*; distance, *1/2 mile*
 Temperature of air, *72* therm. No.,
 " of surface water, " "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0234* temp., *22.5*
 " at depth of fathoms, "
 " at bottom, *1.0232* " *23*
 Number of salinometer, *124*
 Barometer reading, *29.98*
 State of sky,
 Direction of wind, *N. N. E.*; force, *4*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name of vessel, *U. S. Fish Com. Steamer*
 Service to which attached, *U. S. Fish Commission*
 Name and rank of commanding officer,
 Robertson, Lieut.
 Name and position of observer,
 W. H. C. Smith

NOTES RELATING TO STATION NO. 7

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3. The third of the
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5. The fifth of the
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8. The eighth of the
9. The ninth of the
10. The tenth of the

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *72*

Date, *Dec 2, 1881*

Time of day, *12:30*; of tide, *low*

Locality, *off Cape Cod*

Exact position, *Lat. 41° 15' N. Long. 70° 15' W.*

Depth, *10 fms.*

Nature of bottom, *fine sand*

Dredging instrument used, *dredge*

Direction of drift, *N. E.*; distance, *1/2 mi.*

Temperature of air, *72* therm. No.,

" of surface water, " "

" at depth of fathoms, " "

" at bottom, " "

Density at surface, *1.022* temp., *52*

" at depth of fathoms, " "

" at bottom, *1.022* " *22*

Number of salinometer, *72*

Barometer reading, *30.1*

State of sky, *clear*

Direction of wind, *N. E.*; force, *4*

Rain,

Direction of surface current, ; force,

" of bottom " : force,

Name of vessel, *U.S.F.C. Fish Hawk*

Service to which attached, *U.S. Fish Comm.*

Name and rank of commanding officer, *J. A. Smith, Lieut. Comdr.*

Name and position of observer, *Wm. A. Brown, Asst. Surg.*

NOTES RELATING TO STATION NO. . . .

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RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *1111*
 Date, *Dec 17, 1891*
 Time of day, *1:00*; of tide, *low*
 Locality, *off Cape Cod*
 Exact position, *off Cape Cod*
 Depth, *23*
 Nature of bottom, *fine sand*
 Dredging instrument used, *dredge*
 Direction of drift, *drift*; distance, *1/2 mile*
 Temperature of air, *50* therm. No.,
 " of surface water, " "
 " at depth of fathoms, "
 " at bottom, " "
 Density at surface, *1.0242* temp., *22*
 " at depth of fathoms, "
 " at bottom, *1.0238* " *22*
 Number of salinometer, *745*
 Barometer reading, *29.95*
 State of sky, *cloudy*
 Direction of wind, *SE*; force, *4*
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name of vessel, *U.S.F.C. Fish Hawk*
 Service to which attached, *U.S.F.C.*
 Name and rank of commanding officer, *Comdr. J. B. Smith*
 Name and position of observer, *James E. Hunt*

NOTES RELATING TO STATION NO. 1271

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No.

Date,

Time of day, 2.30 P.M.; of tide, 2/4

Locality,

Exact position, 1/2 N. 1/2 S. 1/2 E.

Depth, 100

Nature of bottom, Hard mud & shells

Dredging instrument used, 1/2 ft. dredge

Direction of drift, N.W.; distance, 1/2 mile

Temperature of air, 12 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0242 temp.,

" at depth of fathoms, "

" at bottom, 1.0250 "

Number of salinometer,

Barometer reading, 30.0

State of sky,

Direction of wind, S.W.; force, 7

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, H.M.S. " "

Service to which attached, 1/2 ft. dredge

Name and rank of commanding officer,

Name and position of observer,

V. C. C. C. C. C.

NOTES RELATING TO STATION NO. 100

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RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7378

Date, Dec. 19, 1912

Time of day, 2:30 p.m.; of tide, ebb

Locality, Long Island Sound, N.Y.

Exact position, Lat. 40° 51' 45" N.

Long. 73° 51' 45" W.

Depth, 3 1/2 fathoms

Nature of bottom, soft mud

Dredging instrument used, dredge

Direction of drift, N. by E.; distance, 1/2 mile

Temperature of air, 42 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.022 temp., 21.5°

" at depth of fathoms, "

" at bottom, " 22

Number of salinometer, 111

Barometer reading, 29.8

State of sky, Partly cloudy

Direction of wind, S. by E.; force, 4

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, U.S. Fish Com.

Service to which attached, Fish Com. Station

Name and rank of commanding officer, J. M. Smith

Lieut. Comdr. U.S.N.

Name and position of observer,

H. M. Smith

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 227

Date, Jan 10 1881

Time of day, 2:42 P.M. of tide, high

Locality, Cape Cod Bay, near Cape Cod

Exact position, 1/2 mile S. of Cape Cod

Depth, 10 fathoms

Nature of bottom, sand & mud

Dredging instrument used, dredge

Direction of drift, N. by E.; distance, 1/2 mile

Temperature of air, 72 therm. No.,

" of surface water, " "

" at depth of fathoms, "

" at bottom, "

Density at surface, 71 temp., 22

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 1

Barometer reading, 29.9

State of sky, B.

Direction of wind, N. W. W.; force, 1

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, U. S. Fish Com. Steamer Fish Hawk

Service to which attached, U. S. Fish Com.

Name and rank of commanding officer, J. A. Smith, Lieut. Comdr.

Name and position of observer, K. A. Smith, Lieut. Comdr.

NOTES RELATING TO STATION NO.

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RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7388
 Date, Dec 1, 1912
 Time of day, 3:43 : of tide,
 Locality,
 Exact position,
 Depth,
 Nature of bottom,
 Dredging instrument used,
 Direction of drift, N. E. ; distance, 1/2 mile
 Temperature of air, 71 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0242 temp., 21.5
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 15
 Barometer reading, 29.7
 State of sky,
 Direction of wind, N. W. ; force, 3
 Rain,
 Direction of surface current, : force,
 " of bottom " : force,
 Name of vessel,
 Service to which attached,
 Name and rank of commanding officer,
 Name and position of observer,

NOTES RELATING TO STATION NO.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7-81*Date, *Jan 12 1881*Time of day, *7 1/2* ; of tide, *E*Locality, *off Cape Cod*Exact position, *Lat. 41° 15' N.**Long. 70° 15' W.*Depth, *11 1/2*Nature of bottom, *fine sand*Dredging instrument used, *dredge*Direction of drift, *drift* ; distance, *1/2 mi.*

Temperature of air, therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, temp., *41.5*

" at depth of fathoms, "

" at bottom, "

Number of salinometer, *100*Barometer reading, *30.1*State of sky, *b*Direction of wind, *drift* ; force, *1/2*Rain, *b*

Direction of surface current, ; force,

" of bottom " : force,

Name of vessel, *U. S. Fish Com.*Service to which attached, *U. S. Fish Com.*Name and rank of commanding officer, *Dr. J. M. Smith*Name and position of observer, *V. M. Smith*

NOTES RELATING TO STATION NO.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *2*Date, *2 1912*Time of day, *6.30 a.m.*; of tide, *low*Locality, *off Cape Cod*Exact position, *4 1/2 miles*Depth, *10 fms.*Nature of bottom, *fine sand*Dredging instrument used, *beam trawl*Direction of drift, *drift*; distance, *1/2 mile*Temperature of air, *55* therm. No., *100*" of surface water, *55*" at depth of *10* fathoms, *55*" at bottom, *55*Density at surface, *1.022* temp., *55*" at depth of *10* fathoms, *55*" at bottom, *55*Number of salinometer, *100*Barometer reading, *30.0*State of sky, *partly clear*Direction of wind, *drift*; force, *2*Rain, *no*Direction of surface current, *drift*; force, *2*" of bottom " *drift*; force, *2*Name of vessel, *U.S.S. Albatross*Service to which attached, *U.S. Fish Commission*Name and rank of commanding officer, *J. S. ...*Name and position of observer, *J. S. ...*

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. *1002*Date, *Aug. 10*Time of day, *10:30* : of tide, *low*Locality, *off Cape Cod*Exact position, *44° 24' N. 71° 12' W.*Depth, *2*Nature of bottom, *fine sand*Dredging instrument used, *dredge*Direction of drift, *drift* ; distance, *1/2*

Temperature of air, therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, *1.025* temp., *61*

" at depth of fathoms, "

" at bottom, "

Number of salinometer,

Barometer reading, *29.8*State of sky, *b, c, s*Direction of wind, *SE* : force, *3*

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, *U.S.F.C. Fish Hawk*Service to which attached, *U.S. Fish Com.*Name and rank of commanding officer, *Comdr. J. H. ...*Name and position of observer, *W. H. ...*

NOTES RELATING TO STATION NO.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *101*
 Date, *July 1, 1881*
 Time of day, *10:30* ; of tide, *low*
 Locality, *off Cape Cod*
 Exact position, *4 miles*
 Depth, *24*
 Nature of bottom, *fine sand*
 Dredging instrument used, *dredge*
 Direction of drift, *N. E.* ; distance, *1/2 mile*
 Temperature of air, *75* therm. No., *101*
 " of surface water, *75* " *101*
 " at depth of *10* fathoms, *75* " *101*
 " at bottom, *75* " *101*
 Density at surface, *1.025* temp., *21.5*
 " at depth of *10* fathoms, *1.025* " *101*
 " at bottom, *1.025* " *101*
 Number of salinometer, *101*
 Barometer reading, *30.1*
 State of sky, *b, c*
 Direction of wind, *S. W.* ; force, *1*
 Rain, *no*
 Direction of surface current, *drift* ; force, *1/2 mile*
 " of bottom " ; force, *1/2 mile*
 Name of vessel, *U. S. Fish Com. Steamer Albatross*
 Service to which attached, *U. S. Fish Com.*
 Name and rank of commanding officer, *Comdr. J. A. Smith*
 Name and position of observer, *Wm. H. Smith*

NOTES RELATING TO STATION NO.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *1211*
 Date, *Aug 10*
 Time of day, *10:30*; of tide, *low*
 Locality, *off Cape Cod*
 Exact position, *N. 44° E. 2 1/2 miles*
 Depth, *27 1/2*
 Nature of bottom, *fine sand*
 Dredging instrument used, *beam trawl*
 Direction of drift, *N. by E.*; distance, *1/2 mile*
 Temperature of air, *72* therm. No., *100*
 " of surface water, *70* " *100*
 " at depth of *10* fathoms, *68* " *100*
 " at bottom, *65* " *100*
 Density at surface, *1.022* temp., *20.5*
 " at depth of *10* fathoms, *1.021* " *20.5*
 " at bottom, *1.020* " *20.5*
 Number of salinometer, *100*
 Barometer reading, *30.0*
 State of sky, *b, c, s*
 Direction of wind, *S. by E.*; force, *1*
 Rain, *no*
 Direction of surface current, *drift*; force, *1/2 mile*
 " of bottom " *drift*; force, *1/2 mile*
 Name of vessel, *U.S.F.C. Fish Hawk*
 Service to which attached, *U.S.F.C.*
 Name and rank of commanding officer, *Z. L. Tanner*
 Name and position of observer, *Wm. C. Wood*

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No.

Date, _____

Time of day, _____ ; of tide, 2

Locality, _____

Exact position, 2. 5. 4. 34/40Depth, 24Nature of bottom, fineDredging instrument used, dredge Direction of drift, S. by E. ; distance, 1/2 Temperature of air, 68 therm. No., _____

" of surface water, _____

" at depth of _____ fathoms, _____

" at bottom, _____

Density at surface, 1.024 temp., 22

" at depth of _____ fathoms, _____

" at bottom, _____

Number of salinometer, _____

Barometer reading, 29.9

State of sky, _____

Direction of wind, S. by E. ; force, _____

Rain, _____

Direction of surface current, _____ ; force, _____

" of bottom " _____ ; force, _____

Name of vessel, _____

Service to which attached, U. S. Fish Comm. Name and rank of commanding officer, Lieut. Comdr.

Name and position of observer, _____

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. []

Date, []

Time of day, [] ; of tide, []

Locality, []

Exact position, []

Depth, []

Nature of bottom, []

Dredging instrument used, []

Direction of drift, [] ; distance, []

Temperature of air, [] therm. No., []

" of surface water, []

" at depth of [] fathoms, []

" at bottom, []

Density at surface, [] temp., []

" at depth of [] fathoms, []

" at bottom, [] " 22.1

Number of salinometer, []

Barometer reading, []

State of sky, []

Direction of wind, [] ; force, []

Rain, []

Direction of surface current, [] ; force, []

" of bottom " [] ; force, []

Name of vessel, []

Service to which attached, []

Name and rank of commanding officer, []

Name and position of observer, []

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. *72*Date, *Aug 10*Time of day, *7 20* ; of tide, *low*Locality, *off Cape Cod*Exact position, *4 miles off Cape Cod*Depth, *10 fathoms*Nature of bottom, *rocky*Dredging instrument used, *dredge*Direction of drift, *South* ; distance, *1/2 mile*Temperature of air, *70* therm. No., *100*" of surface water, " *100*" at depth of *10* fathoms, " *100*" at bottom, " *100*Density at surface, *1.0244* temp., *22.5*" at depth of *10* fathoms, " *22.5*" at bottom, *1.0230* " *22.5*Number of salinometer, *100*Barometer reading, *30.0*State of sky, *clear*Direction of wind, *SE* ; force, *2*Rain, *no*Direction of surface current, " ; force, *1/2*" of bottom " ; force, *1/2*Name of vessel, *U.S.S. Albatross*Service to which attached, *U.S. Fish Commission*Name and rank of commanding officer, *James H. Smith, Lt. Comdr.*Name and position of observer, *Wm. C. Smith*

NOTES RELATING TO STATION NO.

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RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7344*
 Date, *Aug 10 1891*
 Time of day, *10:30* : of tide, *1/2*
 Locality, *Long Island Sound*
 Exact position, *45° 45' N. 74° 15' W.*
 Depth, *50 fms.*
 Nature of bottom, *fine sand*
 Dredging instrument used, *Beam trawl*
 Direction of drift, *N. E.* ; distance, *1/2 mile*
 Temperature of air, *72* therm. No.,
 " of surface water, *72*
 " at depth of *10* fathoms, *72*
 " at bottom, *72*
 Density at surface, *1.0270* temp., *23*
 " at depth of *10* fathoms, *23*
 " at bottom, *1.0270* *23*
 Number of salinometer, *7411*
 Barometer reading, *30.0*
 State of sky, *Partly cloudy*
 Direction of wind, *W.* ; force, *1*
 Rain,
 Direction of surface current, *Drift* ; force, *1/2*
 " of bottom " : force,
 Name of vessel, *U.S.F.C. Fish Hawk*
 Service to which attached, *U.S. Fish Commission*
 Name and rank of commanding officer,
 Name and position of observer,

NOTES RELATING TO STATION NO.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *734*Date, *Aug 10 1884*Time of day, *11:30 a.m.*; of tide, *1/2 ebb*Locality, *off Cape Cod*Exact position, *between Cape Cod and N. York*Depth, *10 fms.*Nature of bottom, *fine sand*Dredging instrument used, *beam trawl*Direction of drift, *drift*; distance, *1/2 mile*

Temperature of air, therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, temp., *2*

" at depth of fathoms, "

" at bottom, *1.025* " *20.5*

Number of salinometer,

Barometer reading, *30.0*

State of sky,

Direction of wind, *drift*; force, *drift*

Rain,

Direction of surface current, ; force,

" of bottom " : force,

Name of vessel, *U.S.F.C. Fish Hawk*Service to which attached, *U.S.F.C.*

Name and rank of commanding officer,

Name and position of observer,

NOTES RELATING TO STATION NO.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *1100*Date, *Aug 10 1881*Time of day *11:00*; of tide. *Low*Locality. *off Cape Cod*Exact position, *W. end of Connetquot Bay**bearing from Cape Cod light S. 45° E. 1/2 mile*Depth, *4 1/2*Nature of bottom, *fine sand*Dredging instrument used, *beam trawl*Direction of drift, *W. 1/2 S.*; distance, *1/2 mile*Temperature of air, *73* therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom, "

Density at surface. *1.0245* temp. *22.5*

" at depth of fathoms, "

" at bottom, *1.0245* " *22.5*

Number of salinometer,

Barometer reading. *29.97*State of sky. *b, c, s*Direction of wind, *W. 1/2 S.*; force. *1*

Rain,

Direction of surface current, : force,

" of bottom " : force.

Name of vessel, *U. S. Fish Com. Steamer Fish Hawk*Service to which attached, *U. S. Fish Com.*Name and rank of commanding officer, *Comdr. J. C. Smith*Name and position of observer, *John C. Smith*

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No.

Date, *June 22 1882*

Time of day, *11 30 A.M.* : of tide, *2 1/2 ebb*

Locality, *off Cape Cod*

Exact position, *lat. 41° 55' N. long. 70° 30' W.*

Depth, *5 fms.*

Nature of bottom, *fine sand*

Dredging instrument used, *Beam trawl*

Direction of drift, *S. by E.* ; distance, *1/2 m.*

Temperature of air, *72* therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, *1.0200* temp., *62.5*

" at depth of fathoms, "

" at bottom, *1.0200* " *62.5*

Number of salinometer,

Barometer reading, *29.9*

State of sky,

Direction of wind, *S. by E.* ; force, *2*

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel,

Service to which attached,

Name and rank of commanding officer, *John T. ... Lt.*

Name and position of observer, *William ...*

NOTES RELATING TO STATION NO.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *10*Date, *Aug 22 1881*Time of day, *12:15 P.M.*; of tide, *3/4 ebb*Locality, *off Cape Cod*Exact position, *Lat. 41° 27' 32"**Long. 70° 13' 00"*Depth, *3 1/2 fms.*Nature of bottom, *fine sand*Dredging instrument used, *dredge*Direction of drift, *N. by E.*; distance, *1/2 mile*Temperature of air, *72* therm. No., *100*

" of surface water, " "

" at depth of *3 1/2* fathoms, " "

" at bottom, " "

Density at surface, *1.0241* temp., *22*" at depth of *3 1/2* fathoms, " "" at bottom, *1.0242* " *22*Number of salinometer, *100*Barometer reading, *30.0*State of sky, *b, c, s*Direction of wind, *N. by E.*; force, *1*Rain, *no*Direction of surface current, " : force, *1/2*" of bottom " : force, *1/2*Name of vessel, *U.S.F.C. Fish Hawk*Service to which attached, *U.S.F.C.*Name and rank of commanding officer, *Comdr. J. H. Smith*Name and position of observer, *Wm. H. Smith*

NOTES RELATING TO STATION NO.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 72

Date, Dec 22

Time of day, 3:30 : of tide, low

Locality,

Exact position,

Depth, 10

Nature of bottom, sand

Dredging instrument used,

Direction of drift, S. by E. ; distance, 1/2

Temperature of air,

therm. No.,

" of surface water,

" at depth of fathoms,

" at bottom,

Density at surface,

temp.,

" at depth of fathoms,

" at bottom,

Number of salinometer,

Barometer reading,

State of sky,

Direction of wind, S. by E. ; force,

Rain,

Direction of surface current, ; force,

" of bottom " : force,

Name of vessel,

Service to which attached,

Name and rank of commanding officer,

Name and position of observer,

NOTES RELATING TO STATION NO. *and date*

1 - for
1 - for
2 - for
1 - for

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No.

Date, *Aug 2 1882*Time of day, *10.30* ; of tide, *low*Locality, *Long Point*Exact position, *Long Point*Depth, *10 fms*Nature of bottom, *fine sand*Dredging instrument used, *Long Point*Direction of drift, *drift* ; distance, *1/2 mile*Temperature of air, *72* therm. No., *100*" of surface water, *72* "" at depth of *10* fathoms, *72* "" at bottom, *72* "Density at surface, *1.025* temp., *72*" at depth of *10* fathoms, *72*" at bottom, *72*Number of salinometer, *7*Barometer reading, *29.8*State of sky, *b, c*Direction of wind, *N. E* ; force, *5*Rain, *0*Direction of surface current, *drift* ; force, *1/2*" of bottom " ; force, *1/2*Name of vessel, *Long Point*Service to which attached, *Long Point*Name and rank of commanding officer, *Long Point*Name and position of observer, *Long Point*

NOTES RELATING TO STATION NO. 20-52

1st

2nd

3rd

4th

5th

6th

7th